

Public Health Surveillance: A Poison Center's Perspective

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Objectives

- Role of Poison Control Centers (PCC's) in public health surveillance
- Illustrations of NJPIES involvement in prior outbreaks
- NJPIES experience and actions during the fentanyl epidemic

Poison Control Centers

- Regional PCC for NJ
- Role of Regional PCC
 - Consultation
 - Education
 - Surveillance

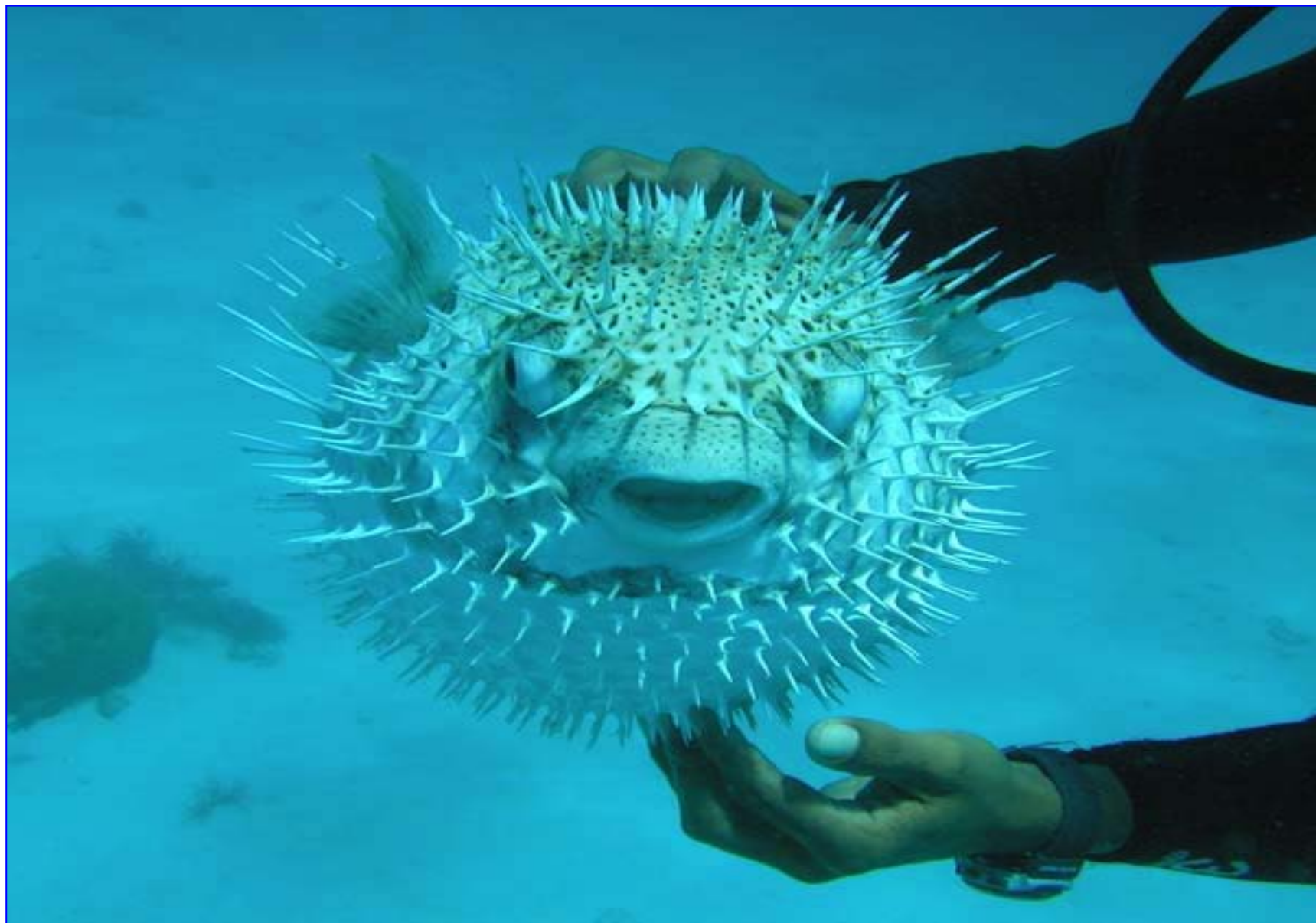
National Surveillance

- PCC's transmits data in real time
- PCC data is used by the pharmaceutical industry and regulatory agencies for post marketing surveillance

NJPIES Experiences

- In 2002 The NJPCC received calls related to neurological signs and symptoms in a husband and wife after eating fish
- This resulted in the discovery of a multi-state outbreak of illness





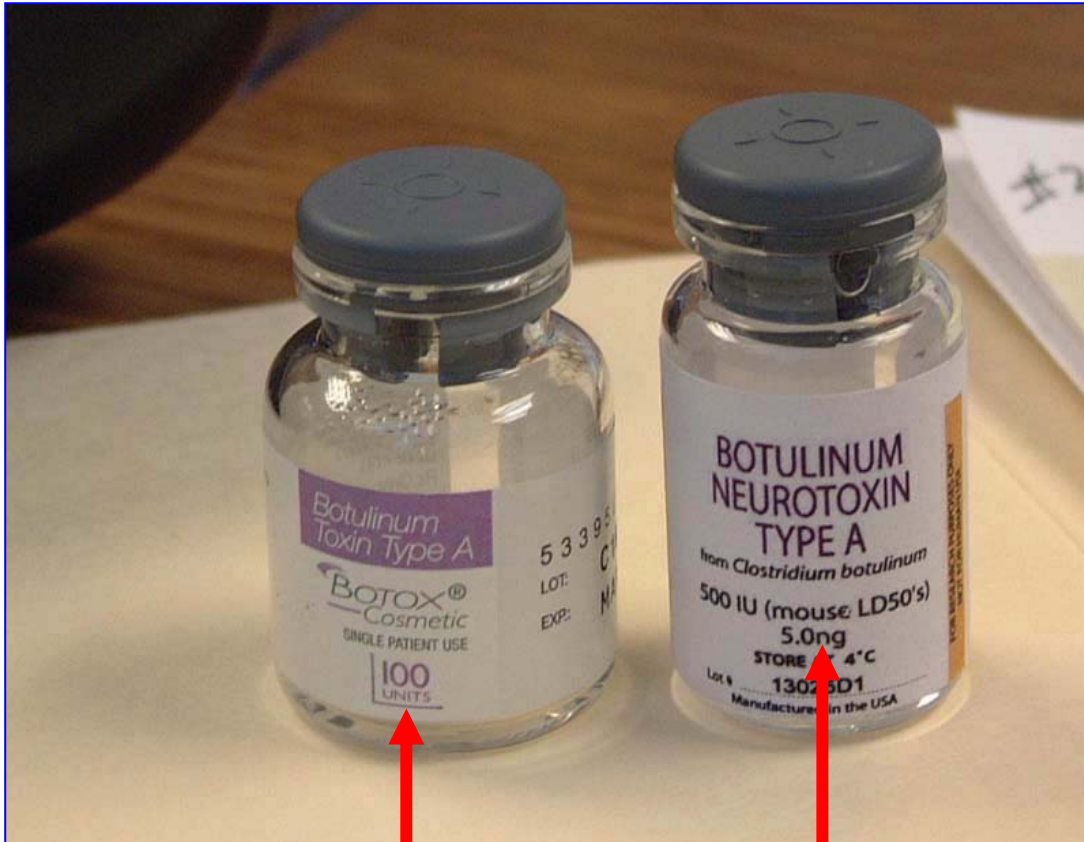
NJPIES Experiences

- Spring 2003 NJPIES learned of an Indian family that developed lead poisoning
- The family was using sindoor to color their food
- This finding prompted a world-wide alert against the use of this substance for food pigmentation



NJPIES Experiences

- In November 2004 a young woman with strange neurological complaints was admitted to a hospital in NJ
- It was felt that her illness was related to the use of an unapproved cosmetic product
- NJPIES's involvement prompted a national investigation



List Biological Laboratories

Botulinum Neurotoxin Type A

from *Clostridium botulinum*

100.0 µg \$500.00

100 units
(1.0 ng?)

500 units
(5 ng)

100 µg
(10,000,000 units?)

NJPIES Experiences

- In early 2005 NJPIES was called about the care of 3 individuals in NJ who had an atypical presentation after snorting heroin
- Soon after, we learned of 6 other cases with similar presentation at 2 other hospitals in other regions of the state
- NJPIES sent an alert to all NJ ED's and posted it on Epi-X

Possible Cyanide-Tainted Heroin -- New Jersey and Pennsylvania, January 2005

Access and Notification:

Make available to all *Epi-X* users
[Click to view user notifications, if any](#)

Distribution:

Contributor's instructions for
distributing this report.

Release outside of Epi-X as needed

Brief Summary of Report:

As of January 30, the source of the heroin has been reported as only from dealers in Easton, PA, and Asbury Park, NJ. Laboratory confirmation of cyanide is pending.

Description:

As of Sunday, January 30, 2005, six male heroin users have been admitted to three different hospitals suffering unusual effects after nasally insufflating heroin. One presented with a lactic acidosis and hypotension and was found to have an elevated pVO₂; the remainder presented with nausea, headache, low potassium, and elevated pVO₂. The venous blood specimens appeared to be arterial even though two patients had blood drawn from central venous lines, confirmed by pressure and radiography.

Investigation of Tainted Heroin -- New York City, February 2005

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Brief Summary of Report:

A total of 6 cases have been reported as of February 9, 2005 in NYC. Report illness that meets the case definition to (212) 764-7667 or (800) 222-1222.

Description:

Beginning January 28, 2005, several male heroin users presented to hospitals in New Jersey and Pennsylvania complaining of unusual effects including agitation, nausea, headache, and weakness after nasal insufflation of heroin. Initial findings by health-care providers were hypotension, tachycardia, hypokalemia, and severe lactic acidosis with an elevated pVO₂. Although these findings were suggestive of cyanide poisoning, subsequent testing failed to identify cyanide and confirmed clenbuterol in several specimens.



MMWRTM

Morbidity and Mortality Weekly Report

Weekly

August 19, 2005 / Vol. 54 / No. 32

**Atypical Reactions Associated With Heroin Use — Five States,
January–April 2005**

NJPIES Experiences

- In 2003 NJPIES became aware of 4 cases of hospital-acquired poisoning in one ICU in one hospital in the state
- NJPIES reported the outbreak to the state health department

The Fentanyl Experience

- April 2006 NJPIES became aware of excess drug overdoses in Camden
- NJPIES then collected information from hospitals in Camden and surrounding areas

The Fentanyl Experience

- The EMS system noted upwards of 60 heroin overdose calls, compared to the normal 10 calls daily
- Some of the heroin overdoses were atypical in that more than the usual amount of naloxone (NarcanTM) was required

The Fentanyl Experience

- NJPIES posted a brief description of the outbreak on Epi-X
- Within minutes of the posting a call came from the Maryland State Health department informing us that they had an unusual occurrence at a hospital in the eastern shore

Summary

- PCC's are staffed with health professionals that are trained to obtain detailed information, health histories, document calls, perform triage, assist in managing of patients, follow up on outcomes and perform surveillance
- PCC's play an important role in identifying disease outbreaks

Thank You

